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ABSTRACT

Of all the reform efforts current in teacher education, the professional development school (PDS) advocated by the Holmes Group shows the greatest promise because it seeks to tie reforms in teacher education to reforms in schools themselves. This document describes how one institution of higher education (University of Utah) and one school district (Salt Lake City, Utah) have together implemented professional development schools. The report presents data on the effectiveness of the PDS program in educating novice teachers and discusses several dilemmas confronted in the evolving PDS partnership. The dilemmas that have emerged from this PDS-creating experience are: democracy versus coherence; collaboration versus academic freedom; didactic versus conceptual views on teaching and learning; replicative versus reflective orientations; program continuity versus equity in faculty loads; and basic versus applied research. Forty-two references are included. (IAH)

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ABSTRACT

Of all the reform efforts current in teacher education, the professional development school shows the greatest promise, because it seeks to tie reforms in teacher education to reforms in schools themselves. The authors describe how one institution of higher education and one school district have together implemented professional development schools, present data on the effectiveness of the PDS program in educating novice teachers, and discuss several dilemmas confronted in their evolving PDS partnership. Democracy vs coherence, collaboration vs academic freedom, didactic vs conceptual views on teaching and learning, replicative vs reflective orientations, program continuity vs equity in faculty loads, and basic vs applied research are the dilemmas that have emerged from the authors' PDS-creating experience.

It is a time of great expectations in teacher education. Reform efforts abound--fifth year programs, professional development schools, and alternative certification are among the many currently on the lips of teacher educators, policy makers, and the public. It is hoped that these latest approaches will produce what past reforms have failed to accomplish: better schools and better teachers through better teacher education.

Of these many new reform efforts, a particularly promising approach is the professional development school (PDS), because it seeks to link the university and the public school and by so doing to better link theory with practice. The PDS movement shows great potential but, as yet, has produced little evidence to support expectations that this latest attempt to improve schools and teacher education can achieve its goals. Further, few models are available to suggest what a PDS should look like in practice. In the process of implementing PDS, we can expect to confront both predictable and unforeseen obstacles. Sharing information on program structures, program effects, and emerging obstacles will help advance the development of PDS, with a view toward providing the data necessary to assess its efficacy as a reform effort. The purposes of this article are twofold: 1) to describe the history, goals, and structure of our evolving PDS program and its effects on participants; 2) to share the issues and obstacles emerging from the PDS-creating experience.

To these ends, we will first discuss the history of the concept of school-university partnerships, speculate on why such partnerships have failed to flourish in the past, and elaborate on the Holmes version of the concept. Next we will trace the evolution of our own program, its current structure, and how it circumvents some past problems in linking universities and schools; we will also present evidence of the efficacy of our PDS model. We will close with a discussion of the newest obstacles we are facing.

School-University Partnerships--Again and Again

Cuban (1990) has pointed out that there are recurring cycles of education reform in which particular approaches and ideas keep reappearing. Educators reform "again and again and again" he comments, but not much

progress is made. Little has changed in the way we teach and the way we expect students to learn since the inception of the common school (Cohen, 1990; Cuban, 1984; Johnson, 1986). Reform movements are accompanied by a lot of noise and motion but classrooms tend to remain unchanged. School-university partnership is an example of such a cyclical reform. In its present permutation, however, it offers the hope of a solution through the development of an integrated system which involves teachers, administrators, and university faculty working together on school restructuring projects and teacher education.

Before Holmes. Throughout this century there have been repeated attempts to get public schools and universities working together on educational reform. One hundred years ago the Committee of Ten called for a conference of university and school teachers to discuss ways of improving education (Clark, 1988). Participants at this conference urged that colleges "...take more interest than they have heretofore done, not only in the secondary schools, but in the elementary schools... in improving the schools in their respective localities..." (Cohen, 1974, p. 1944).

At the same time that the Committee of Ten was urging closer ties between universities and schools, John Dewey was advocating the establishment of laboratory schools housed on university campuses. In Dewey's vision, laboratory schools were to serve as research sites and as places for educating new teachers on a joint basis between colleges of education and public schools (Stallings & Kowalski, 1990). Laboratory schools reached their peak in the 60s, but even at their height they failed to bring the research component of Dewey's ideal into existence. Research was never seen by those operating lab schools as their top priority; they placed a premium on educating children and new teachers. As the demand for teachers grew, the capacity of the lab school as a field site was exceeded, the need to place student teachers in public schools grew, and the utility of the lab school faded. Too, "For successful operation, laboratory schools need university and school district support. Incongruence in expectations and values has made it difficult to secure the

desired level of support. Consequently, laboratory schools have been on the decline since 1969" (Stallings & Kowalski, 1990, p. 252-253).

Replacing the laboratory school as a reform focus in the 1970s was the short-lived portal school. Portal schools were to serve as "... a point of entry for promising new curricula and practices" (Chambers & Olmstead, 1971, p. 2). They were to function as places for educating new teachers, as research sites for university faculty, and as a real-life context for assessing the effectiveness of new practices and curricula. The features of the portal school included an advisory council composed of school and university representatives, a collaborative site selection process, and provision of planning time for developing and implementing goals. Perhaps because of a change in the reform climate, perhaps due to a lack of systematic evaluation, the portal school reform effort died out by 1980 (Stallings & Kowalski, 1990).

The sameness of these reforms, and as will be seen, their similarity to the Holmes Agenda, is striking. The tripartite goals (educate beginning teachers, educate experienced teachers, conduct research), the collaborative governance structures, the emphasis on inquiry into practice--all of these are recurring elements. Also striking is their recurring failure. Why did they fail? One obvious hypothesis is the lack of evaluation and systematic research and development; these were never central goals to the people doing the work of school-university partnerships. Because no body of literature accrued, later reformers could not build on the lessons of earlier attempts at collaboration. Another hypothesis is that these reforms were overly top-down, that they were imposed from above--from a district office on a school, from a university president or dean on the teacher education faculty. As Fullan (1991) and others have pointed out, for an innovation to succeed, those who implement the program must share and have ownership of the vision. Yet another hypothesis is that the focus of these reforms may be too narrow; even though these were ostensibly collaborative efforts, the locus of change was the individual teacher in the classroom, not the school, not teacher

educators, not colleges of education. It is possible that components of the educational system cannot be changed in isolation from other each other.

The new school-university reform movement. The notion of school-university partnerships was revived in the mid- 1980s with the Carnegie Forum's proposal for clinical schools and the Holmes Group push for professional development schools. The clinical school was one of many reforms suggested in the 1986 Carnegie report, A Nation Prepared: Teachers for the 21st Century.

> Clinical schools would link faculties in elementary and secondary schools, colleges of education, and colleges of arts and science to provide the best possible learning environment for teacher preparation... The clinical school was seen as analogous to a teaching hospital... Participants in this partnership would have opportunities to reflect upon teaching and learning within the clinical school environment. (Stallings & Kowalski, 1990, p. 255)

The notion of sites of research, development, and practice where state of the art knowledge could be tested, refined, and transformed into practice is also present in the Holmes Group Professional Development School concept. In 1986, The Holmes Group (a latter-day "Committee of 110" deans of colleges of education) proposed the institution of PDS as sites of exemplary practice where novice and experienced teachers could be educated and where university and school faculty could collaborate on educational research and development (Tomorrow's Schools, 1990; Tomorrow's Teachers, 1986). According to the Holmes group, the PDS is to:

> "bring practicing teachers and administrators together with university faculty in partnerships that improve teaching and learning on the part of their respective students...They would provide superior opportunities for teachers and administrators to influence the development of their profession, and for university faculty to increase the professional relevance of their work, through (1) mutual deliberation on problems with student learning, and their possible solutions; (2) shared teaching

in the university and schools; (3) collaborative research on the problems of educational practice; and (4) cooperative supervision of prospective teachers and administrators" (Holmes Group, 1986, p. 56).

Critical to the Holmes reform agenda and the PDS idea is a systems view of the educational enterprise. The educational system is interwoven--you tug on one sleeve and you're tugging on the whole coat. A program of teacher education cannot be excellent without an excellent school in which to place student teachers. A school cannot be excellent without teachers graduated from excellent programs. To improve one part of the system, one must improve all of it. For this reason, the Holmes group advocates close collaboration between university and public school educators, and attends to both school change and teacher education change. As Fullan (1982) has cautioned, educational change requires not only good ideas, but a theory of change by which to guide the process. The Holmesian theory is that change requires a holistic, long-term, collaborative effort between public schools and schools of education for the purpose of improving both. The Holmes group, then, has chipped away at one of the possible reasons that prior partnership efforts collapsed; that is, the locus of reform has broadened to include the educational system, not just the individual classroom teacher.

According to the Holmes Group, six principles are to guide the genesis of professional development schools. The first is teaching and learning for understanding. Students should do more than complete isolated drills; they must actively participate in experiences that enable them to construct meaningful learning and to continue to learn for a lifetime. Second, PDS should be organized as communities of learning in which democracy is practiced as well as preached. Third, all students should be involved in learning for understanding, not just the children of the predominant culture. The fourth principle is continuing learning for all adult participants. Teachers, teacher educators, and administrators alike need to continue their own professional growth both for its own sake and to model lifelong learning for their students. Fifth, reflection and research on practice should

characterize life in PDS. An important role for the PDS is the joint production by teachers and researchers of new knowledge about teaching and learning, knowledge that is more accessible and useful to practitioners than that derived from traditional research. Finally, if the first five principles are implemented, the sixth will result: inventing a new institution. New organizational structures in both schools and universities will be required in order to truly put the Holmesian PDS principles into action (Tomorrow's Schools, 1990).

Obstacles to School-University Collaboration

The Holmes Group agenda calls for major shifts in pedagogy in the public schools and universities--a move from didactic, teacher-directed instruction to conceptually based, egalitarian approaches. It also proposes radical changes in organizational structures and roles in schools and universities. There is a circularity, however, in this agenda. Radical shifts in the structure and pedagogy of educational institutions will only happen if schools and universities work together to develop theory-in-practice, a practical theory of pedagogy. But the solution to the problem is also the problem--schools and universities occupy different cultures which embrace different views of teaching and learning, organizational structures, role definitions, and reward structures. Currently there is little agreement in theory or practice between school and university personnel on what embodies exemplary practice. Extant structures in both institutions provide little incentive for professionals to become involved in collaborative research and development activities. These problems exemplify some of the more predictable, immediately apparent obstacles to be overcome as soon as a school-university partnership is launched. We frame these obstacles, discussed below, as dilemmas--problems to be not solved but resolved.

Didactic vs conceptual views of teaching and learning. Our elementary education program is based on cognitive and social constructivist views of teaching and learning (see, for example, Anderson, 1984; Brown, Duguid, & Collins, 1989; diSessa, 1982; Driver, 1982; Piaget, 1970; Schonfeld, 1988).

This approach views learners as active participants in the learning process who construct meaning through personal and social experiences, and develop "theories" about how the world works. Students entering a classroom are not empty vessels to be filled with knowledge; on the contrary, they already possess knowledge and beliefs about the content to be learned. The teaching-learning process involves more than simply adding on content; it involves the development of a new conceptual perspective through which content can be personally mediated and understood. Learning often means changing beliefs about the concept being taught. Show-and-tell methods are rarely sufficient to accomplish this. Across a wide range of content areas, traditional didactic methods have been shown to be ineffective in changing learners' naive beliefs and developing conceptual understanding (see, for example, Anderson & Smith, 1987; Dole & Niederhauser, 1991; Hewson & Hewson, 1988; Lampert, 1988; McCloskey, 1983).

This view of learning is applied in the instructional practices we help our novice teachers develop and in the methods we use to teach them, i.e., we encourage them to teach how we teach. This framework forms the basis for a coherent integrated approach to instruction in the elementary methods courses (Dole & Niederhauser, 1991; Peck & Connell, 1991; Nattiv, Winitzky, & Drickey, 1991; Stofflett, 1991; Stofflett & Stoddart, 1991; Stoddart, Connell, Stofflett, & Peck, 1991). Our approach, however, often comes as a shock to our teacher candidates. Like other teacher candidates, most of our students enter the program believing they know how to teach; they expect to teach as they were taught and expect students to learn as they learned (Lortie, 1975; Stofflett, 1991; Stoddart, et al., 1991; Weinstein, 1989). Our novices hold didactic views of instruction; when they enter the program, they view the teacher's role as telling pupils what they need to know and giving them practice in it. A series of studies, however, demonstrate that the conceptually-based pedagogy used in our methods classes brings about shifts in teacher candidates' understanding of conceptual approaches to pedagogy and

their ability and willingness to use them (Peck & Connell, 1991; Stofflett, 1991; Stofflett & Stoddart, 1991; Stoddart, et al., 1991).

The wrinkle appears when our novice teachers venture into our professional development schools, schools where didactic, show-and-tell methods predominate. This should not and did not surprise us. Transmission approaches to pedagogy have dominated public schools since the inception of the common school (Cohen, 1990). The mentoring of novices by expert teachers is a principle component of most teacher education programs (Huling-Austin, 1988). The novice learns by watching the expert teach and by being in turn observed and receiving feedback and support on their own instructional practice. The Holmes Group places a particular emphasis on the role of PDS teachers in modeling exemplary practice and providing guidance to novices as they develop their instructional expertise. Predictably, the problem we encountered was that many of our PDS teachers frequently modeled and reinforced traditional views of instruction that were in conflict with the pedagogy espoused and practiced in the elementary education program.

For example, in the science methods class the candidates are taught to use conceptual change techniques that directly focus on identifying students' naive scientific theories and providing related discovery and discussion experiences to help students develop scientifically accurate conceptions. The first stage of this process is to elicit students' preconceptions abou the scientific phenomenon being taught; these are later confirmed or disconfirmed through inquiry. Teacher candidates frequently start a cycle of instruction by brainstorming with the students and writing their ideas on the blackboard. Many PDS teachers objected strenuously to this practice because in their view candidates were misleading students by "writing wrong answers on the board". They often interrupted candidates to tell the students the "right answer", in some cases didactically teaching their own scientific misconceptions.

Faced with this conflict, teacher candidates often tried to conform to the PDS teacher's expectations. The following interaction between a PDS cooperating teacher and a teacher candidate, Ms B, is illustrative. The

candidate was running a discussion based on poster-sized photographs of bees performing various functions, with the second grade students actively engaged in the questioning and discussion process, in an effort to help the students socially construct understanding.

Student How does the queen bee fit back into the comb when she is so big with eggs?

PDS T (Interrupts). Ms B needs to continue with her lesson. She has a lot to cover, so I want you to stop asking questions.

Ms B (Stops discussion and begins to tell students the information.)

(Several students raise their hands to ask questions.)

Ms B (To PDS Teacher) Can I let them ask questions?

PDS T No. You need to move on. If there's time at the end for questions, ok. If not they really don't need to know this anyway; it's not in the core curriculum.

Ms B (Continues telling.)

(Student in front row whispers inaudible question.)

PDS T (Walks over to student.) I want you to come and sit with me since you can't stop asking questions. (Stofflett, 1991, p. 87)

In this scenario, the candidate begins to conform to the PDS cooperating teacher's expectations that she teach didactically. The example illustrates how many cooperating teachers model didactic instruction, and how they use it in their mentoring of novices. Another PDS teacher commented, "I'm the teacher, he (the candidate) is the student. He should do what I tell him."

Replicative vs reflective orientations. This replication model of teaching is also in conflict with the teacher education program's emphasis on reflective practice. While university faculty of course believe candidates have much to learn from PDS faculty and professors, they also believe in the importance of critically reflecting on practice, on continually re-examining the goals and assumptions on which actions are based, on continually refining

technique. When candidates ask teachers the same challenging questions they ask themselves, friction can result. These conflicting expectations from PDS teachers and methods instructors were stressful for the candidates.

A corollary dilemma concerns divergent views of teacher education. Based on our informal interaction with many PDS teachers and the formative evaluation data we have collected from them, we find that most teachers hold an implicit replication model of teacher education. That is, they believe teacher candidates learn best through direct experience, and should spend the maximum amount of time, preferably a year, with practicing teachers in the schools; PDS teachers argued for early and extended field experiences. On the other hand, university faculty see value in a more staged entry into the profession, one that meshes theory and practice, and that engages candidates in critical inquiry. The teacher education faculty believe the research indicating that unfocused practical experience may be miseducative (Feiman-Nemser & Buchmann, 1987; Zeichner, 1986). These faculty wanted time to change candidates' didactic views and counter the "apprenticeship of observation" (Lortie, 1975). To teach conceptually, the faculty argued, candidates need to understand the content and pedagogy conceptually, and this requires a series of structured experiences which help them reconstruct their prior understandings (Stoddart, et al., 1991). These instructors favored later and carefully guided field experiences coupled with much reflection and analysis.

Other teacher education programs using conceptually based instruction have encountered similar difficulties. Jim Raths at the University of Vermont and the faculty of the Academic Learning Program at Michigan State, which both focus on cognitive approaches to teaching subject matter, report like problems (Education Week, 1991; Roth, Rosaen, & Lanier, 1988).

This dichotomy in the views of teaching, learning, and teacher education espoused by the university and the school faculty is one of the toughest dilemmas we face. Without appropriate models of instruction, teacher candidates find it difficult to translate theory into practice. It is unreasonable, however, to expect veteran practitioners to model and coach

novice teachers in an approach to instructional practice in which they have not been grounded and in which they do not believe. But if the university attempts a top-down imposition of pedagogy on a PDS, what happens to collaboration? Imposing pedagogy would be equivalent to intellectual imperialism. Not imposing pedagogy might represent abandoning principle. The dilemma is clear. If we wish to remain true to our own standards of practice and to use state of the art knowledge about instruction, we must persuade PDS faculty of its utility and expect them to do all the changing. Alternatively, if we are to adhere to values of collaboration, programmatic democracy, and learning community, as also advocated by the Holmes Group, we must be open to influence by the didactic world view of teachers. We will talk about our ways around these dilemmas in our discussion of our program below.

Basic vs. applied scholarship. This dilemma also involves the culture differences between the university and public schools and is also predictable; it hinges on the reward structure of the university. If we perform the kind of field-based, applied research called for in the Holmes agenda and valued in the public schools, our research productivity and the stature of the some of the journals we publish in may decline. It will take time for teachers to develop understanding of research, and every step taken collaboratively, from framing research questions, to data collection and analysis, to writing up the findings, will take longer. For example, one author has worked for the past year with a group of PDS teachers who volunteered to participate in a collaborative research project. It has taken the entire academic year to settle on mutually agreeable research questions and methodology. Next year the data will be collected, analyzed, and then reported. Normally this cycle requires only one year, not two, and this professor will publish less as a result. Further, if we are to have a greater impact on practice, we must publish with our school colleagues in practitioner journals, as well as the more scholarly journals. This is also risky behavior for the typically untenured faculty staffing PDS programs. We're not sure that there is

consensus in the university community that such collaborative research is a legitimate course of action.

The Salt Lake District/University of Utah Partnership

How have we coped with these dilemmas and satisficed these competing goals? We address these questions next in a review of the history of our program and an outline of its current structure.

History of the partnership. Many other universities and school systems across the country are engaged at various stages of a lengthy discussion process intended to result in Professional Development School partnerships. Most of these efforts involve much advance planning to establish the roles and responsibilities to be shared and the required relationship between the two partners (Clewett, 1988; Holmes, 1986). The relationship between the Salt Lake City School District and the University of Utah has followed a different course. Instead of implementing a planned partnership model--collaboration by design--ours is a relationship formed through a process of program evolution, an evolution we've described as following a progression "from cooperation to collaboration". (Holt, Johnson, and O'Keefe, 1989).

This experience has helped clarify what we believe is a useful distinction between cooperation and collaboration--a distinction hinging on the opportunities for decision-making and participation, also discussed by Hord (1986). Initial efforts between the school district and the university were characterized by an agreement to cooperate: programs unilaterally designed were offered to the other party. Decision-making was limited to a willingness to participate and share resources. The relationship that has evolved is now characterized by a commitment to collaboration: both parties share in the development and ongoing refinement of program designs and policy decisions. Both the range of decisions and kinds of participation have broadened and deepened. Our experience with this progression from cooperation to collaboration emphasizes the opportunistic nature and fragility of school-university partnerships while suggesting how participation in discrete cooperative projects can gradually build toward a climate for collaboration.

This insight raises another potential hypothesis regarding why past partnerships may have floundered--they may have been merely cooperative, not collaborative. Goodlad (cited in Clark, 1988) has indicated three basic conditions needed to support collaboration:

1. The partners need to have a degree of dissimilarity.
2. The goal should be mutual satisfaction of self-interests.
3. Each party must be selfless enough to assure the satisfaction of these self-interests. (Clark, 1988, p. 41)

As will be seen, the Salt Lake/University of Utah PDS model shares these characteristics.

The current, and continuously evolving, partnership began with cooperative work on four small, unconnected projects that were planned to meet separate needs and interests: student teaching centers, a cooperative masters degree program, a teacher internship program, and joint university/district positions. The individual success of each project, over the past decade, formed separate threads of cooperative connection between the district and department of teacher education--threads that were ready, given the proper conditions, to be woven into a more collaborative cloth. In our case the "proper conditions" prompting the shift from cooperation to collaboration resulted from two almost simultaneous occurrences: university membership in the Holmes Consortium and restructuring of district services following a new superintendency.[1] At the beginning stage, each program existed as a result of individual entrepreneurship--each designed at separate times to serve the needs of separate sets of participants.

The first thread in the weave of cooperative projects was the university-initiated elementary field service centers which began operation in the fall of 1978. Following the demise of an on-campus laboratory school, and recognizing the deficiencies of isolated school placements, an elementary

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[1]The University of Utah borders the boundaries of the Salt Lake City Schools, a district of some 36 elementary and secondary schools serving approximately 25,000 students within the metropolitan area of Utah's capital city.

division faculty member proposed that two schools in each of three local districts be identified to serve as field service sites for clusters of teacher candidates. These selected schools were to be called "Professional Development Centers" (PDC) with the hope that they would become what this title suggests. The original conception was for the PDCs to work with the Elementary Education Division by serving as field experience and student teaching sites for teacher candidates, as inservice sites for the district, and as sites for the schools and college to become involved in classroom based research (Holt & Peterson, 1981; Nutting, 1982). At each site, the school principal was designated director of the center and qualified cooperating teachers were appointed as adjunct faculty at the university.

From their inception in 1978 to the mid-80s when they began to be phased out, the Professional Development Centers, like the portal schools on which they were modeled, were never able to fully live up to their name. The PDCs, while "almost immediately successful" (Nutting, 1985, p. 2) as field sites, never functioned as centers for inservice professional development or produced cooperative research between school and college faculty. Based on his extensive interview study, Nutting concluded that most center administrators and cooperating teachers, as well as college faculty, resigned themselves to having the PDCs serve merely as student teaching centers with little mutually planned staff development or classroom based research. There were two major flaws that prevented its ultimate realization in practice. First, and perhaps most crucial, was the absence of any formalized administrative involvement from the district central office and little direct administrative support at the college beyond the teacher education faculty involved. Second, flowing inevitably from the first design flaw, was a lack of institutional structures for collaborative decision-making on policy issues.

The absence of formalized central office involvement in the PDC project is part of the distinction we see between cooperation and collaboration. Based on this design conception, each of the four District PDCs worked only with a college faculty member assigned to coordinate and carry out the field

component of the teacher education program. Consequently, PDC principals continually commented that they felt the district central office was unaware of what they were doing. This lack of direct district involvement in the project resulted in the inability of central office administration to perceive PDCs as a means to achieve any of its goals, or to recognize the PDCs as a staff development resource for the district. We found that partnerships could be as dysfunctionally bottom up as top down.

There was no formal organizational structure bridging both institutions that could decide how to incorporate activities at the separate centers into broader district or college efforts in staff development and research. This highlights a problem with cooperative projects: while they may meet important needs of at least one of the partners involved, they seldom receive the attention and resources necessary to serve the needs of both. In regards to the PDCs, their potential for creating school-based centers for professional development and classroom based research was never realized.

The second thread to be strung between college and district was a Cooperative Masters Program. Launched in the fall of 1980 as an experimental graduate program specifically created for District teachers, the "Co-op", as the project came to be called, was initially another example of program development through an "agreement to cooperate". Ultimately, however, the unique design features of the program broadened the base of participation between district and university thus creating the first real catalyst for change.

The cooperative MEd program was initiated at the request of the district's superintendent of schools and designed specifically to improve participants' understanding of their own practice and enhance their professionalism as classroom teachers. While holding to the same general coursework and practicum requirements as those for the regular masters degree program, the Co-op had several non-traditional features. To ensure relevance to practice and district concerns, coursework for the new program focused on classroom and district issues and participants were strongly encouraged to

include central office and school administrators on their practicum committees. Further, to make attending classes more accessible for practicing teachers, class times, schedules and locations were more flexible and could be adjusted to the school-year regimen of participants.

The most innovative aspect of the program however, which had the most future impact, was the cohort nature of the experience--teachers took their classes together as a group and had a university faculty member assigned as coordinator for the entire two year duration of the program. One role assumed by the coordinator was to promote integration of separate course content and encourage its application to classroom practice. In addition, by meeting regularly each week to share both the struggle and stimulation typical to any graduate course of study, teachers developed a group cohesiveness that provided an effective support system and facilitated completion of the program.

In large part the Cooperative Masters Program far exceeeded the expectations of district and university, yet its success as a cooperative venture was mixed. As a district-initiated project, there was more formal involvement with the project at the district level--the director of inservice was assigned to facilitate its functioning. Still, the program existed as an isolated project, removed from and uncoordinated with other district programs. At the university, the Co-op was viewed by some as a "watered-down" program not part of the regular structure of the department. Also, few faculty members were willing to commit to the full two years required to coordinate the program. On the other hand, this design provided a pool of practicing classroom teachers who were also linked to the department as graduate students. By the end of the first cooperative masters experience, participants had created unique personal and professional connections to both district and university. Co-op members were familiar with programs and faculty in the Department and had also assumed leadership positions in the district--through career ladder positions, service on committees and task forces, etc.--while maintaining a commitment to classroom practice. Thus, a

pool of professional educators had been created who could service the needs of district, university, or both. When the District requested that a second Co-op be organized, the stage was set for the evolution to collaboration.

Joint faculty appointments represent the third strand of cooperation; these are clinical instructorships in the Department of Educational Studies filled by teachers who also maintain a role in the Salt Lake District. The first such position, initiated in 1985, was a direct outgrowth of the Cooperative Masters Program. And, just as the Co-op was a catalyst for change from cooperation to collaboration, this position became a vehicle for extending the partnership between district and university. However, just as in the previous three cooperative projects, joint appointments came to exist as a result of individual entrepreneurship and fortuitous timing.

Following the successful conclusion of the first Co-op, the district requested that another be launched. The university coordinator of the original Co-op, viewing this as an opportunity to continue the research agenda begun with that group, agreed to direct the second cohort as well. Based on her initial experience, however, the coordinator requested that the program have a stronger, more direct channel of communication with the district. Outside of having a contact within the district to resolve logistical problems during the original Co-op experience, the coordinator felt largely unaware of district goals, programs, and issues that would affect participants. What was needed, she felt, was a district liaison directly involved in the program. Therefore, support was requested from both district and university to create a position that would enable a member of the first Co-op to serve as graduate assistant for the second.

Initially, this first joint position resulted from an agreement to cooperate in order to achieve several sets of short-term goals within both the District and the Department. In spite of its problematic beginning, the clinical instructorship proved successful. At the university, support was generated by the Dean of the College of Education. A member of the Holmes Group Consortium, he advanced the argument that involving practicing educators

in the department as clinical faculty served two important functions. First, joint apointments created the direct links with schools essential to effective teacher preparation programs and, second, clinical faculty could provide knowledge of the everyday realities of school systems often lacking in a research institution. Also, the department was unable to staff its recently initiated internship program (described below) for a second year. Installing a clinical instructor as coordinator offered a way to preserve the project and further strengthen relations with the district.

In the six years since its somewhat unintentional launching, the joint faculty/District liaison position has emerged as a hinge-pin connecting district and university and as the vehicle for their continued collaborative partnership. Two factors contributed to this development. The first was the assignment of a clinical instructor as internship coordinator. Since in previous assignments this individual had participated in both masters co-ops, instructed methods courses, and supervised students in undergraduate field service sites, one district teacher now had familiarity with each cooperative program. The second important development occurred at the district level and finally created conditions that allowed a joint faculty position to exist as a functional liaison between district central office and university. This was the reconfiguration of the district inservice office into a staff development department under the direction of an assistant superintendent.

The fourth and final thread was an alternative method for preparing elementary teachers and school principals. When the current superintendent was appointed in 1985, he recognized the need for preparing new administrators since a significant number of school principals was nearing retirement. Therefore, he suggested a cooperative university-school district program for teacher and administrative interns.

The model adopted met the university's desire to pilot an alternative to traditional student teaching while also providing prospective administrators with an opportunity to serve an apprenticeship in an elementary school. The program required two teacher interns, chosen from those teacher candidates

ready to student teach, to work as full-time classroom teachers under the direction of an administrative intern. Since interns earned half a regular beginning teacher's salary, adding them to the school faculty was a cost-effective way to provide an apprentice administrator for the site.

A new position has since resulted, that of teacher facilitator. This position is similar to the administrative intern in that both have as a major responsibility the mentoring of teacher interns; the difference is that the teacher facilitator does not have to be pursuing an administrative certificate and is planning on returning to the classroom following completion of the facilitator role.

Obviously school districts and universities can meet their separate agendas through cooperation on individual projects. However, in the area of teacher education and staff development, each institution can offer resources that are typically not available in the other. To the extent that a district views staff development as an important aspect of its mission and the university is committed to effective beginning and continuing education of teachers, then a natural area of collaboration is created.

The District has since implemented a comprehensive staff development plan; one of the major components of the new model was collaborative programs. This collaborative component was defined as the chief responsibility of the district liaison holding a joint position at the university. Thus, the organization of district staff development efforts institutionalized the cooperative arrangements of the four programs. What remained was to find ways to integrate the discrete programs so that the strengths of one could be used to further the aims of another. This integration and expansion of collaborative efforts is currently being achieved through the creation of PDS.

Current program. These prior cooperative efforts gave us many workable collaborative program elements. We have incorporated many of these in our current PDS model, focusing to date on the element of collaboration and the function of preparing beginning teachers. Retained largely as is are the PDC goal to educate beginning teachers, the intern program, the teacher

facilitator role, and the university/district liaison. We have also begun a cooperative masters program lodged in the PDS. We next outline our program's features in more detail.

One key feature is the organization of our teacher candidates into cohorts for their final year of pedagogical studies, much as in the Masters Co-ops. For three quarters, candidates take the same classes together, pursue field experiences together in the two to three PDS sites attached to each cohort, and lend each other professional and moral support. This program element helps establish the norm of collegiality and contributes to the Holmes principle of creating a learning community. Input from the cohort is frequently sought and used regarding the day-to-day operation of the program, fostering an atmosphere of democracy and professional responsibility. A faculty member is given one course off per year for coordinating the cohort, and is designated as cohort leader.

Another major element of the program is its governance structure. A steering committee composed of representatives from all stakeholders--teachers, administrators, district office personnel, candidates, and the university--meets regularly (usually twice a quarter) to manage the logistics of the program, solve problems as they arise, coordinate inservice and program evaluation, and discuss issues confronting the group. The group is chaired by the cohort leader. The steering committee provides a structure within which school-university collaboration can happen. For example, during the past two years, the steering committee has coordinated needs assessments for and scheduling of staff development workshops, monitored formative program evaluation, and made adjustments in assignments and schedules in response to candidate and teacher input, among other activities. One exciting development that occurred early on was that this group began to surface and explicitly discuss the conflicting views of teaching, learning, and teacher education held by university and school faculty. Steering group members have acknowledged that these previously covert disagreements placed candidates in an awkward, no-win position. These discussions will continue and deepen as we

work together, hopefully culminating in the "shared vision" described by Fullan (1982) as a necessity for successful innovation.

Several new roles have been created for the PDS. A central role is the familiar one of the teacher facilitator. The teacher facilitator plays a key part in maintaining the links between the university and the school, and ensuring that candidates understand how to apply learnings from their university classrooms in elementary classrooms. As explained above, two teacher interns are assigned in the PDS as full-time classroom teachers, relieving the teacher facilitator of classroom duties, a programmatic feature handed down from our former cooperative days. The facilitator mentors the two interns, provides some of the supervision for candidates, conducts site-based seminars for them, serves on the steering committee, and coordinates PDS activities at the site.

Akin to the role of teacher facilitator is the consulting teacher. The consulting teacher has many of the same responsibilities as the teacher facilitator, but remains a full-time classroom teacher. Some of our PDS weren't able to maintain openings for intern teachers, and thus were not able to free up an experienced teacher to handle the teacher facilitator job. Principals were having to shoulder the whole load, and this was overwhelming. It soon became clear that principals needed assistance, and the consulting teacher position was created, funded by the district.

A third role incorporated into the PDS, inherited from pre-PDS times, is that of the district liaison. Again, the liaison wears two hats: she is a clinical faculty member at the university, and a member of the staff development department in the district. Her job is to maintain open lines of communication between the schools, the university, and the district central office. She serves on the steering committee, handles some supervision, and carries out a wide variety of other teacher education functions.

Accompanying the development of new roles has been the development of new opportunities for cooperating teachers to interact with university faculty. One of these is the cooperating teacher seminar. These are monthly

meetings held on site, chaired by the cohort leader and attended by the district liaison, the purposes of which are to maintain two-way communication across both institutions, to spot and solve problems (logistical, interpersonal, conceptual) as they arise, and to provide cooperating teachers with information on mentoring beginning teachers. Another arena for interaction is inservice provided by the university especially for PDS faculty. One professor is given one course off per year to conduct inservice in the PDS. An important detail the district liaison oversees is to ensure teachers receive district lane change credit for their participation in both seminars and workshops, ensuring that the district reward system supports PDS participation. The content and scheduling of inservice has been based on a negotiation between needs assessment information and available faculty resources.

Another important program feature is the planning committee. The planning committee met before the university academic year started, and was composed of the cohort leader, the district liaison, all the professors teaching in the cohort over the year, PDS principals, a teacher facilitator, and two teacher representatives. Using activities developed by Pankratz and Galluzzo (1988), we gathered for two, morning-long meetings, to make decisions by consensus about the program theme and goals, about beliefs we shared on teaching, learning, and teacher education, and about which parts of the curriculum would be covered in university coursework and which covered in the field. Those decisions were summarized and communicated to PDS faculty in the cooperating teachers' handbook and at an orientation meeting. The theme was also communicated to teacher candidates, and became a recurring thread in their seminars over the year.

We have also created together a collaborative site selection process We found that both school and university faculty needed a period of "courtship" to assess whether they were compatible before entering into a long-term commitment to collaborate. PDS site selection is now a staged process. First, both the university faculty and district administrators share

their preferences for PDS sites and settle on three or four likely candidates. The district makes the initial contact with the school to ascertain their interest. This begins a period of open disclosure between school and university faculty so both groups can make an informed decision about whether to begin working together. The university faculty explain the conceptual and organizational framework for the program and visit school faculty in their classrooms. School faculty explain their procedures and goals. In follow up meetings concerns or reservations can be raised by both groups. If both groups agree to proceed, we become "engaged". During this period, the school serves as a site for field placements and the university provides staff development. At the end of that time either party may withdraw. If the two groups develop a compatible relationship, the school becomes a PDS and we agree to collaborate for at least three years.

Other collaboratively set policies and processes include developing criteria for selecting PDS sites, criteria for selecting cooperating teachers, and a collaborative procedure for making cooperating teacher selections.

Has our program achieved the goals and enacted the principles that are to undergird professional development schools? In some ways, yes, and in a fashion which mitigates against some of the forces that may have weakened school-university partnerships in the past. The very existence of a collaborative governance structure accomplishes, at least in part, the goal of linking school and university, and provides a structure within which the two cultures may be bridged. We have begun to realize the Holmesian vision of collaboration through our steering committee, cooperating teacher meetings, joint goal-setting, and collaborative policy- and procedure-setting. We also share human resources in ways that accomplish ends important to both parties. These actions are evidence of a truly collaborative, not merely cooperative, relationship. The formal establishment of mechanisms to launch a relationship telegraphs the expectation that it will be sustained over sufficient time for real change to occur. The development of a theme for the cohort, a set of shared beliefs, and program goals helps realize the principle

of teaching and learning for understanding for our teacher candidates, and again helps link the two cultures. Our representative governance structure, our commitment to democracy in program decision making, our frequent face-to-face interactions at meetings, all contribute to the creation of a learning community that crosses the cultures. We have made some progress in ensuring that PDS are places where adults can continue to learn through the inservice and seminar components of our model and through collaborative research projects. The creation of new roles and the attention to teacher reward structures go part of the way in inventing new institutions, and are representative of the systems approach that may have been lacking in the past; our PDS model is both top-down and bottom-up, and communication and decision making flow both ways. Finally, we are making concerted efforts to conduct research and development activities. But what has been the impact of our PDS model on participants, especially teacher candidates? Is the PDS model an effective means of educating new teachers? Next we turn to presenting several lines of evidence on the efficacy of our program.

Evaluating the PDS

We wanted to answer the questions: Is the constellation of program elements described above effective? What is the program's impact on teacher candidates, on cooperating teachers, on schools, and on university teacher educators? After all, if PDS aren't effective, we should pursue other reform strategies. We have collected a variety of data in a variety of settings to help us answer these questions.

Impact on teacher candidates. We have conducted studies for the past two years in our elementary cohorts seeking to understand program effects on teacher candidates. In the 89-90 cohort, we used the goals developed collaboratively by the school-university planning team as our criteria. These goals were that teacher candidates would demonstrate the ability to:

1. plan, organize, and manage a variety of learning environments.
2. perform direct, indirect, individual, and cooperative instruction.
3. check for student understanding in a variety of ways.

4. align goals, teaching method, and assessment strategy, and apply this information in subsequent instruction.

5. work effectively as a member of a community of learners.

Several data sources were used in a single-group design to assess the effectiveness of the PDS program in accomplishing these goals. Teacher candidates were asked to prepare portfolios documenting their ability to carry out the goals of the program; portfolios were turned in and evaluated at the end of the academic year. Interviews were also used to assess teacher candidates' reflective ability; these were conducted in the fall, winter, and spring. We will first present the portfolio data, then the reflection data.

Portfolios contained a variety of materials, among them statements of educational philosophy, lesson plans, unit plans, samples of student work, sample assessment tools, journal entries, audio and video tapes, evaluations from cooperating teachers, university supervisors, and peers, and narratives tying plans, lessons, and student work together. Teacher candidates selected and organized those items they felt most efficiently and effectively depicted their abilities.

After portfolios were turned in at the end of the year, a research assistant evaluated them. She used a Likert scale to gauge the degree to which each person met each goal, from 1 signifying poor work, that no evidence was shown, to 3, signifying average work, through 5, signifying exemplary work. She also wrote a narrative report highlighting each participant's strengths and weaknesses.

Portfolio analysis revealed that accomplishment of program goals was high and broad-based. The grand mean over all goals and all participants was 3.8 on the Likert 5-point scale. Fifty-three percent of the students received mean scores between 4 and 5. On the first goal (planning, organizing, and managing a variety of learning environments), the sample mean was 4.1, with a mode of 5. Similarly, results on the second goal (performing a variety of teaching strategies), the group mean was 3.8, again with a mode of 5. Attainment of the remaining goals was also high.

The narrative report fleshes out the skeletal numerical analysis. For example, one candidate included a plan for a math lesson which in her words had "bombed". She described her evidence that students had not understood the lesson; she presented excerpts from her journal in which she had reflected on why students had not grasped it and had reviewed her options for reteaching. Next she supplied a revised lesson plan which built on her students' prior knowledge and incorporated the use of manipulatives. Her own and her cooperating teacher's evaluation of the second lesson was positive, and the included samples of student work showed that their understanding of the material was high. This candidate demonstrated her ability to teach, assess, reflect, and reteach, thus meeting several program objectives.

Another line of evidence of program impact on teacher candidates comes from a series of interviews conducted over the course of the 89-90 academic year (Winitzky, 1991). Candidates' reflective thinking was assessed fall, winter, and spring quarters, using an interview format based on the Teacher Reflective Thinking Taxonomy (Simmons, Sparks, Starko, Pasch, & Colton, 1989). The Taxonomy is theoretically grounded in the work of several scholars, drawing in particular on schema theory, on philosophical contributions to thought on reflection, and on current views of teacher reflection. The authors of the Taxonomy and interview format have established concurrent validity by showing that scores on the interview correlate with methods course performance and grade point average.

The reflective interview required candidates to analyze a teaching episode of their choice, and to discuss this episode in terms of any contextual factors or societal concerns that struck them as relevant. The greater their ability to analyze and make such connections, the higher their score; possible scores ranged from 1-10. The interviews were taped, transcribed, and scored by two trained coders. Interrater agreement with single-level disparity as the standard for disagreement was 73%; lowering the criterion to double-level disparity, the standard used by Simmons, et al. (1989), raised interrater agreement to 100%.

Reflection scores increased from a mean of 6.1 (SD = 1.5) in the fall, to 8.3 (SD = 1.0) in the winter, and finally to 9.0 (SD = .9) in the spring ($F_{2,82}$ = 23.4, $p < .001$, $n = 19$). These numerical data suggest a strong influence on candidates' reflective abilities, presumably due to experiences within the teacher education program, including the PDS.

In addition to the 89-90 data, a third line of evidence comes from the 90-91 cohort (Stofflett & Stoddart, 1991). In this study of science methods teaching, the researchers wanted to know whether the type of pedagogy used in the methods class influenced candidates' understanding of content and pedagogy. Twenty-six participants were randomly assigned to three groups: Traditional Content treatment, Inquiry-Oriented treatment, and Conceptual Change treatment. In the Traditional treatment, instruction consisted of readings, lectures, demonstrations, and verification laboratories, in which fact recall and correct answers were stressed. Instruction in the Inquiry-Oriented treatment involved the play-debrief-replay method, in which a question was posed about the content, candidates explored the question in the lab, debriefing was conducted in which all answers were accepted, and exploration continued. The Conceptual Change treatment consisted of a five-step approach, beginning with diagnosing preconceptions, then exploring the phenomena and questioning students so as to confirm or disconfirm these preconceptions, and closing with applications to the real world.

Candidates in the Traditional and Inquiry-Oriented groups showed no increase in science concept understanding from pre- to posttest nor on the delayed posttest. Those in the Conceptual Change group, however, did exhibit significant change ($p < .01$) on the posttest and maintained that change on the delayed posttest. Follow-up interviews revealed that those candidates in the Conceptual Change group whose cooperating teachers were supportive of their efforts to use this type of pedagogy exhibited the greatest skill in implementing the method during student teaching.

While this study did not provide direct evidence of PDS efficacy, we did take from it a renewed appreciation of the importance of the cooperating

teacher. If the cooperating teacher was open to conceptual change teaching, the candidate was more likely to implement it effectively and to have a positive attitude towards it. This highlighted for us both the importance of continuing evaluation, research, and development on PDS, the importance of continuing staff development, and the importance of continuing collaboration.

Impact on schools. Evidence of the impact of our PDS model on schools, teachers, and children is still quite anecdotal and informal. Principals report to us that they see their teachers growing professionally, that teachers use innovative strategies more often, and that more collegial relationships have developed. In-house surveys show that cooperating teachers rate the preservice program and staff development activities very highly.

Another informal line of evidence comes from two elementary schools in a neighboring district where we established PDS two years ago. When we entered these schools, the reading programs in place were radically behaviorist and exclusively phonics based. After only two years of association with us, teachers are incorporating whole language and literature-based programs in their classrooms on a large scale and are writing grant proposals to enhance their collection of materials for supporting their new, more eclectic reading program.

These multiple data sources give us some degree of confidence that our particular implementation of the PDS concept is quite successful in producing effective, thoughtful, collegial new teachers. As a group, they have demonstrated that they have mastered a variety of research-based teaching strategies, that they can critically reflect on practice, and that they can function professionally with colleagues. There is also some evidence, albeit weak, of impact on schools. Of course, we cannot say which program element--the cohort arrangement, democratic governance structure, enhanced university-school communication, the teacher facilitator role--contributed to these outcomes. Further systematic research will be needed to tease out the more from the less effective components.

Impact on the College of Education. The missing link of evidence on the efficacy of our PDS has to do with its impact on the teacher education faculty and the College of Education. We have not systematically collected data on ourselves, but in all honesty we detect few changes in our own thinking about teaching and learning, little change in the department or college reward structure, and little change in our organizational structure.

Conclusion

While we have made great strides in operationalizing the Holmes agenda and accomplishing Holmsian goals, work remains. More needs to be done, for example, on the task of developing PDS as sites for research and reflection. A new development is the joint provision by the department and the district for monies to support PDS research in the 91-92 academic year. This will be very helpful, and more such opportunities are needed.

Another task only partially done is the significant alteration of teaching and learning for the majority of children being schooled in PDS, and of the school organization itself. Our PDS still exhibit the eggcrate organizational structure devised to meet the needs and suit the temper of times long past, they still exhibit primarily the lecture-recitation-worksheet form of instruction bemoaned by many as inadequate (eg., Goodlad, 1983), and they still exhibit a heavy control orientation towards classroom management. Of course, this task brings us face-to-face with the dilemma we discussed earlier: how much can or should we impose our views on school faculty?

Our self-assessment is that we have managed the predictable dilemmas, foreseeable problems, and past pitfalls fairly well. Our democratic governance structure, long-term commitments, sharing of resources, and creation of new roles, among other program features, will over time help us circumvent the cultural differences that divide university and school. Inevitably, however, as we resolve one set of obstacles, we encounter new ones. The new problems we face revolve around the college of education, our own culture, our own values, and our own organizational structure. We turn now to a discussion of emerging dilemmas.

Program continuity vs equity in faculty loads. When university teaching assignments are made, care is taken to ensure that loads are evenly distributed. The administration has been made aware of the intense time demands of teaching in the cohort, and has tried to equalize faculty loads by rotating faculty out of cohort teaching and cohort leadership on a regular basis. While this has happily enhanced the research productivity of faculty, it has had the deleterious side effect from the PDS perspective of having to readjust to new university leadership and teachers quite frequently. As a result, program continuity has suffered. It is difficult to develop shared understandings over time if the people change before you've had enough time to understand each other. We are tugged in different directions by the competing goals of producing good research and running good programs.

Coherence vs democracy. A frequent complaint about programs of teacher education is their lack of coherence, their lack of a consistent theoretical perspective that can provide an intellectual scaffolding for the learning of new teachers (Lanier & Little, 1986). Candidates usually take a scattered smorgasbord of courses and little or no effort is put into making connections across courses or between coursework and field experiences. Remedies to this haphazard arrangement include organizing students into cohort groups, using a team approach, and operating under a program theme. All of these represent mechanisms by which coherence can be enhanced, mechanisms which we have successfully employed.

There is a cost, though, in that to operate coherently might mean some loss in democratic decision making. Democracy, too, is an important value to maximize, essential in creating a learning community and central to Holmes ideals. But if all stakeholders have an equal say, then there's a risk that coherence will be diminished. For example, a control orientation to classroom management is completely at odds with a classroom democracy approach. It would be hard for proponents of these differing perspectives to find common ground and present a single, coherent view to beginning teachers. Further, coherence requires some consistency and predictability. But the more

consistent, predictable, and thus coherent we are, the less we can be flexible and adaptable to the emerging needs of program participants.

Collaboration vs. academic freedom. This is related to both of the above dilemmas. Collaboration represents the Holmesian theory of change; it is viewed as essential to the process of reform. Academic freedom to teach in one's own way and to conduct one's own research is a hard-fought and dearly held value in the academy. But to collaborate means to accept strictures from others. University professors don't like strictures imposed on them, even if they've had a say in the process. We are struggling to resolve this dilemma as we think through, for example, the kind of research that should happen in a PDS. Should researchers who have clear lines of programmatic research have to collaborate with teachers, adapting their research questions and methods in response to teacher needs? If not, how then can we make research more accessible, useful, and meaningful to teachers? Is it "collaborative" to simply insert our own programs of research into the PDS? Again we are pulled between coherence and democracy--programmatic, non-collaborative research is more likely to contribute to a coherent body of literature, while non-programmatic, collaborative research is more democratic and more likely to create a sense of a community of learners. One outcome is that we've broadened our notion of what a PDS is to include partnerships with schools that do not serve as field placement sites, but which through the entrepreneurship of particular faculty members and principals, serve exclusively as research sites for the study of mutually perplexing problems.

Another complication is that some faculty members' work is more directly connected to teacher education and the PDS than others. This results in the inequitable situation of some people having to accept the greater strictures and time demands that come with PDS work, while others are free to operate as usual. Should professors then have choice about whether they work in PDS or not? How do we deal with methods professors who elect to opt out of PDS work? Alternatively, should we require all department faculty to participate in PDS? In that case, what role could the Department's historians play? Many on our

teacher education faculty argue that either all should have a choice or none should have choice, either anyone can opt out or everyone helps; neither alternative is popular.

This issue raises another potential hypothesis to account for past school-university partnership failures--the implementation of these reforms has fallen on the shoulders of a small number of teacher education faculty, people whose lives are already very busy meeting the combined demands of teaching, research, and supervision. Perhaps past teacher educators simply ran out of energy. Many of us directly involved in PDS-creation have voiced uncertainty about whether we have enough energy and human resources to carry PDS through, both in the short term and the long term. Over the short run, the time demands are high, with meeting piled on meeting in efforts to cement consensus. The resource demands, too, are staggering. It is not at all clear at this point whether we can afford our PDS program; many lines will need to be devoted to inservice and field-based research. We wonder, then, whether we can maintain this energy level and resource output over the necessarily long haul needed to bring our vision into being. If the number of faculty engaged in PDS work could expand, if the workload were shared, we would have a better chance to actualize that vision. But we are finding that the only thing harder than reaching consensus with public school faculty is reaching consensus with other professors.

What is needed next is a resolution of these dilemmas facing departments and colleges of education. The profession urgently needs a vision of what the college of education should be. We suggest that the Holmes Group's next publication be titled, Tomorrow's Colleges of Education. In the meantime, we are hoping that our great expectations, both for schools and for teacher education, will sustain us.

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